

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (Canceled)

Claim 16. (New) An imaging apparatus comprising:

a casing having an optical filter;

a plurality of light sources in the casing, each emitting an invisible light to an object;

and

a two dimensional image sensor in the casing surrounded by the light sources and receives reflected lights from the object through the optical filter,

wherein the optical filter selectively transmits an invisible light and blocks a visible light.

17. (New) The imaging apparatus according to claim 16, wherein the light sources are infrared LEDs.

18. (New) The imaging apparatus according to claim 16, wherein the two dimensional image sensor is a CCD image sensor.

19. (New) A portable imaging apparatus capable to place on a desk, comprising:
a casing having an optical filter at the top surface of the casing;
at least one light source in the casing, each upwardly emitting an invisible light through the optical filter; and

an image sensor disposed in the casing and downwardly receiving reflected lights from an external object through the optical filter,

wherein the optical filter selectively transmits such light having a predetermined wavelength corresponding to the light source in the casing.

20. (New) The image apparatus according to claim 19, wherein the light sources are infrared LEDs.

21. (New) The imaging apparatus according to claim 19, wherein the image sensor is a CCD image sensor.

22. (New) The imaging apparatus according to claim 21, further comprising a control mechanism configured to control the CCD image sensor to generate a first image when the light source is emitting the light and a second image when the light source is not emitting the light.

23. (New) The imaging apparatus according to claim 22, wherein the image sensor takes out only reflected lights from a difference between the first image and the second image.

24. (New) The imaging apparatus according to claim 19, comprising a plurality of the light sources arranged symmetrically around the imaging sensor.

Appl. No.: New Div. Application of SN 09/146,957

Filed: HEREWITH

Preliminary Amendment Dated: July 3, 2003

25. (New) The imaging apparatus according to claim 24, further comprising a control mechanism configured to control the image sensor to generate a first image when the light sources emit the lights and a second image when the light sources are not emitting the lights.

26. (New) The imaging apparatus according to claim 25, wherein the image sensor takes out only reflected lights from a difference between the first image and the second image.